

CLIPBOARD ORGANIZER FOR DATA ACQUISITION

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This application claims the benefit of previously filed U.S. provisional patent application Serial Number 60/469,095 to Talmon Murphy, Jr., filed May 9, 2003, entitled "Clipboard Organizer Assembly".

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TECHNICAL FIELD

The present invention relates to the field of clipboards and portable organizers for data acquisition and, more particularly, to a hand-held clipboard organizer or portable writing board organizer for acquisition and processing of data related to real estate appraising, inventory management, and general field use.

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BACKGROUND ART

In the areas of real estate, appraising, surveying, construction, and engineering it is often necessary for specialists in these professions to gather and analyze data in the field. A hand-held writing board, such as a clip board, is usually required to take notes and record data. In addition several electronic devices are necessary for field use such as miniature or hand-held computers, laser distance measuring units, global positioning system (GPS) units, and cameras. There is also some need for storage capability. It is difficult to carry all these devices into the field and to have rapid access to each as needed. Clipboards with internal storage are known, and organizers with internal storage are known, but none of these are constructed to be useful in the field where several electronic devices need to be used consecutively or in rapid succession for data acquisition and processing. Data gathering tool kits are known which are useful in criminal investigation, but must be worn to be portable because of their size, and are not constructed as a simple writing board with storage that can be carried in one hand. What is needed is a clipboard-like container or writing board that can be carried in one hand, which organizes a plurality of electronic and hand-operated devices for data acquisition and processing in the field.

DISCLOSURE OF INVENTION

The present invention is a portable writing board organizer with storage space
5 and a handle, providing ready access to a computer, a laser distance measuring
device, a scope, a camera, a GPS unit, a tripod, a tape measure, a ruler, a divider
tray, and a clipboard. The computer can have sketching and appraisal software. The
clipboard organizer is ideally suited for use in the field in the areas of real estate,
especially appraisal of real estate, surveying, construction, and engineering. The
10 laser measuring device in conjunction with a scope allows accurate electronic
measurement of land, buildings, and related structures, and the data thus acquired
can be stored and processed in the computer. The computer can also detect, record
and process sketching electronically, and can acquire location data through the GPS
unit. The appraisal software utilizes this field data to generate appraisal reports, but
15 the computer can also generate reports related to other specialties such as
surveying, construction, and engineering. Because the board-like organizer is the
size and shape of a clipboard it is light weight and can be carried easily in one hand.

An advantage of the present invention is a portable clipboard organizer that
greatly facilitates acquisition, processing, and reporting of data in the field.

20 Another advantage is the organization of electronic and hand operated
devices so that the devices can be used simultaneously or consecutively to rapidly
acquire and store data obtained in the field.

Another advantage is the ability to sketch electronically or on a clipboard.

25 Another advantage is the ability to use a laser distance measuring device
with a scope and a GPS unit.

Another advantage is that the invention provides a light weight clipboard
organizer that provides a plurality of electronic data acquisition devices, and which
can be carried in one hand.

30 BRIEF DESCRIPTION OF THE DRAWINGS

Figs. 1 shows a perspective view of the portable writing board organizer of
the present invention.

Fig. 2 shows a diagram of the inner aspect of the portable writing board organizer in the open position.

5 **Fig. 3** shows a top view of the portable writing board organizer.

Fig. 4 shows a bottom view of the portable writing board organizer.

Fig. 5 shows a left side view of the portable writing board organizer.

Fig. 6 shows a back view of the portable writing board organizer.

10 **Fig. 7** shows a top view of an alternate embodiment of the present invention.

Fig. 8 shows a bottom view of an alternate embodiment of the present invention.

BEST MODE FOR CARRYING OUT THE INVENTION

15 While the following description details the preferred embodiments of the present invention, it is to be understood that the invention is not limited in its application to the details of construction and arrangement of the parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced in various ways.

20 **Fig. 1** shows a perspective view of the portable writing board organizer 10 of the present invention. The device has a top portion 11 and a bottom portion 12, each with a front end 17, a back end 18, a first side (left side 37) and an opposite side (right side 52). The top portion 11 is pivotally connected to bottom portion 12, for example by hinges 24. The top portion 11 has an outer surface 13 and an inner surface 15 (see **Fig. 2**), and the bottom portion has an outer surface 14 (see **Fig. 2**) and an inner surface 16. Top portion 11 has an opening 19 to access a laser distance measuring device (not shown), and an opening 20 to access a miniature computer (not shown), such as, for example, a personal digital assistant (PDA), a tablet computer, a pocket PC, handheld computers, and the like. The computer is held in place at opening 20 by strap 32. The computer can have sketching software and appraisal software which is known in the art and is commercially available. The left side 37 of top portion 11 has a ruler 33. The inner surface 16 of bottom portion 12

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has an attachment 27 to hold the laser measuring device in bottom portion 12. The back ends 18 have an opening 23 to accommodate a scope for the laser measuring device. The left sides 37 have an opening 36 to allow the transmission and detection of a laser beam. The bottom portion 12 has a divider tray 29 which can hold other electronic devices, such as a GPS unit, memory cards, electrical connectors and cables, plus any other supplies as desired. Bottom portion 12 has an opening 28 which can accommodate a camera lens for connection to the computer. Bottom portion 12 has a measuring tape 30 which can be accessed through an opening 31 in left sides 37. Bottom portion 12 also has an opening 34 for accommodating external electrical connections to other computers or electronic measuring devices, and an opening 35 for attachment of a tripod to maintain the clipboard organizer 10 more steady during data acquisition. The front ends 17 are constructed to form a handle 21, and have a locking mechanism 22 to maintain the upper portion 11 and bottom portion 12 in a reversibly closed position, thereby forming a storage compartment.

Fig. 2 shows a diagram of the inner aspect of the portable writing board organizer 10 in the open position. This view further shows a hook and pile connector 27 which holds the laser distance measuring device in place against the inner surface 16, where the back of the laser distance measuring device also has a corresponding hook and pile connector. Although this is a preferred connector mechanism, any suitable connector mechanism may be used. Also shown is a preferred embodiment for holding the computer in place at opening 20, using a hook and pile arrangement consisting of a strap 32 that attaches to connector 50 (also hook or pile), further secured by plastic foam blocks 51 that prevent lateral movement of the computer. Other connector mechanisms may be used as desired.

Fig. 3 Shows a top view of the portable writing board organizer 10, illustrating the preferred orientation of openings 19 and 20. Fig. 4 shows a bottom view thereof, illustrating the clip 25 to form the clipboard feature of the device on the outer surface 14 of bottom portion 12, and a string band 36 to hold documents in place. Fig. 4 also illustrates the preferred location of opening 28 for a camera lens, and for opening 35 to connect a tripod.

Fig. 5 shows a left side 37 view of the portable writing board organizer 10 in the closed position, illustrating the preferred location of the laser opening 26, the tape measure opening 31, and ruler 33. Although ruler 33 is shown as located on top portion 11, it may also be located on bottom portion 12. **Fig. 6** shows a back view thereof, illustrating the preferred orientation of opening 23 for a scope used with the laser distance measuring device.

Figs. 7 and 8 show a simplified alternate embodiment of the present invention that has all the features of the embodiment shown in **Figs. 1-6**, but does not have a laser measuring device. The simplified version is useful for less complex activities, such as, for example, evaluating inventory with a scanner or bar code reader. **Fig. 7** shows a top view illustrating the preferred orientation of opening 20 to hold the computer, where opening 23 is used to transmit and receive a scanning beam used in association with the computer. The computer can have scanning and code reading software, which is known in the art. **Fig. 8** shows a bottom view thereof, illustrating the preferred orientation of the opening 28 for a camera lens used in association with the computer.

The foregoing description has been limited to specific embodiments of this invention. It will be apparent, however, that variations and modifications may be made by those skilled in the art to the disclosed embodiments of the invention, with the attainment of some or all of its advantages and without departing from the spirit and scope of the present invention. For example, the clipboard organizer of the present invention may be constructed of any suitable material including plastic, metal, or wood, or a combination thereof. The clipboard organizer can be of any desired size or dimension. In addition to a rectangular shape, the clipboard organizer can also have a square, round, or oval shape. The computer can have data storage and processing capabilities to handle commercially available software programs supporting laser distance measuring devices, GPS units, scanners, code readers, cameras, and the like.

It will be understood that various changes in the details, materials, and arrangements of the parts which have been described and illustrated above in order to explain the nature of this invention may be made by those skilled in the art

without departing from the principle and scope of the invention as recited in the following claims.